

REMARKS

Favorable reconsideration of this application is respectfully requested in view of the following remarks.

Independent Claims 1 and 4 have been amended without narrowing the claim scope to adopt the Examiner's helpful suggestion set forth at the top of page two of the Official Action. The amended claims thus recite the original claimed subject matter in a slightly different manner. In particular, Claims 1 and 4 now recite that when the detecting means detects that the vehicle is stopped the determining means determines whether a child restraint system is equipped on the vehicle, and when the detecting means detects that the vehicle is not stopped the determining means does not determine whether a child restraint system is equipped on the vehicle seat. Accordingly, withdrawal of the claim rejection based on the second paragraph of 35 U.S.C. § 112 is respectfully requested.

Independent Claims 1 and 4 define an occupant determination device for a vehicle seat comprising a load sensor (a plurality of load sensors) provided at a seat body, a controller that calculates a detection load value based on a load value output from the load sensor (load sensors) to determine an occupant sitting on the vehicle by comparing the detection load value and a predetermined threshold value, a determining means for determining whether or not a child restraint system is equipped on the vehicle seat based on a variation of the detection load value, and a detecting means for detecting whether or not the vehicle is stopped. When the detecting means detects that the vehicle is stopped the determining means determines whether a child restraint system is equipped on the vehicle seat, and when the detecting means detects that the vehicle is not stopped the determining

means does not determine whether a child restraint system is equipped on the vehicle.

As discussed in the present application, this occupant determination device allows for an accurate determination of the presence of a child restraint system, and avoids faulty determinations which may occur due to load variation caused by vibration while the vehicle is running.

The Official Action sets forth a rejection of all of the original claims based on the disclosure in Japanese Application Publication No. 2002-178813. This document discloses a vehicle seat that includes load sensors 21-24, together with a CPU 26. As described in the English language abstract of the '813 Japanese application publication (copy attached), the CPU 26 performs an occupant discrimination depending upon the sum load detection value S representing the sum of the load detection values detected by the load sensors 21-24. The system determines that an adult is not seated on the vehicle seat when the sum load detection value S_0 is determined to be smaller than a given value A when the fastening of the seat belt 11 is detected.

However, the '813 Japanese application publication does not disclose the combination of a detecting means that detects whether or not the vehicle is stopped and a determining means that determines whether or not a child restraint system is equipped on the vehicle such, wherein when the detecting means detects that the vehicle is stopped the determining means determines whether a child restraint system is equipped on the vehicle seat, and when the detecting means detects that the vehicle is not stopped the determining means does not determine whether a child restraint system is equipped on the vehicle.

It is thus respectfully submitted that independent Claims 1 and 4 are patentably distinguishable over the disclosure in the '813 Japanese application publication.

Dependent Claims 2, 3 and 5-16 set forth additional distinguishing characteristics associated with the occupant determination device. For example, new Claims 15 and 16 recite that the detecting means detects whether or not the vehicle is stopped based on the status of an ignition switch. Thus, when the ignition switch indicates that the vehicle is stopped, the determining means determines whether a child restraint system is equipped on the vehicle seat, and when the ignition switch indicates that the vehicle is not stopped the determining means does not determine whether a child restraint system is equipped on the vehicle. This additional aspect of the claimed occupant determination device is also not disclosed in the '813 Japanese application publication.

Dependent Claims 2 and 5 set forth that the detecting means detects the vehicle stop condition based on at least one of an ignition switch signal, a shift position signal, a parking switch signal, a courtesy switch signal, and a vehicle speed pulse. As noted, the '813 Japanese application publication does not disclose any claimed relationship between detecting the vehicle stop condition and determining whether or not a child restraint system is equipped on the vehicle seat. Thus, these claims are further distinguishable over the disclosure in the '813 Japanese application publication.

New independent Claim 17 recites that the vehicle seat occupant determination device comprises a plurality of load sensors provided at a seat body, a controller for calculating a detection load value by summing up load value outputs

from the plurality of load sensors and determining an occupant sitting on the vehicle seat based on a variation of the detection load value, a determining means for determining whether or not a child restraint system is equipped on the vehicle seat based on a variation of the detection load value, a detecting means for detecting a vehicle stop condition based on a status of an ignition switch, and a seatbelt switch for detecting whether or not a seatbelt is fastened. In addition, when the detecting means detects the vehicle stop condition and the seatbelt switch detects that the seatbelt is fastened, the determining means determines whether a child restraint system is equipped on the seat

The '813 Japanese application publication does not disclose the combination of a detecting means which detects a vehicle stop condition based on a status of an ignition switch, and a seatbelt switch which detects whether or not a seatbelt is fastened, wherein when the detecting means detects the vehicle stop condition and the seatbelt switch detects that the seatbelt is fastened, a determining means determines whether a child restraint system is equipped on the seat. It is thus respectfully submitted that new independent Claim 17, together with new dependent Claims 18-20, are also allowable.

Early and favorable action with respect to this application is respectfully requested.

Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful

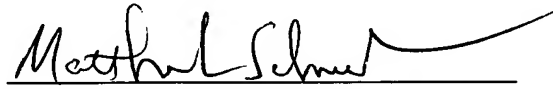
in resolving any remaining issues pertaining to this application the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

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Date: June 30, 2006

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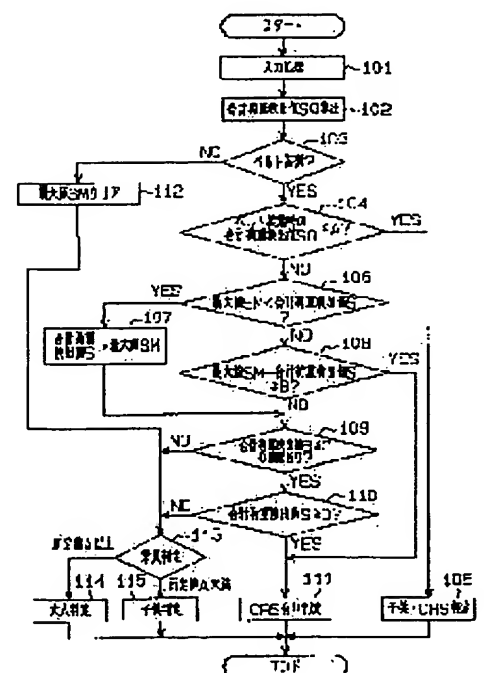
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(54) VEHICULAR SEAT

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a vehicular seat that can appreciably detect a seating state and the like of the vehicular seat.
SOLUTION: A central processing unit 26 performs an occupant discrimination in dependence on a sum load detection value S to which load detection values by load sensors 21 to 24 arranged on a seat body 1 are summed up. A sum load detection value S0 found smaller than a given value A when fastening of a seat belt 11 is detected results in a determination that no adult is seated.



LEGAL STATUS

[Date of request for examination]

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